

**REMARKS**

Claims 2-18, 20, 22, 23, 25, 26, and 29 are pending in this application.

Without disclaimer of the subject matter contained therein, Claims 24, 27, and 28 have been canceled. Claim 29 has been amended to correct antecedent basis and to incorporate the subject matter of canceled claim 27. No new matter has been added. Reconsideration in view of the following remarks is respectfully requested.

Applicants gratefully acknowledge the indication in the Office Action that Claims 25 and 26 are allowed and that Claims 4, 13, 15-17, 23, and 29 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, for at least the reasons set forth below, Applicants respectfully submit that all pending claims are in condition for allowance.

**DOUBLE PATENTING**

Claims 28 stands objected to under 37 C.F.R. § 1.75 as being a substantial duplicate of Claim 25. Without conceding the propriety of the rejection, Claim 28 has been canceled.

**CLAIM REJECTIONS UNDER 35 U.S.C. §103(a)**

- I -

Claims 2, 3, 5-12, 14, 18, 20, and 22 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,060,674 ("Brown"). The rejection is respectfully traversed.

Brown relates to a wrapper for a smokeable article and to the smoking article, itself, both providing substantial reduction in sidestream smoke without significant

adverse effect on properties such as mainstream particulate matter and puff count, obtained by modifying cigarette wrapper paper formulations to contain a carboxylic acid salt, preferably a nonhydroxy acid such as a succinic acid salt, as well as sodium carboxymethyl cellulose, and in preferred embodiments may include a burn modifier such as monoammonium phosphate. (Column 2, Lines 14-28). The modifications of Brown are not intended to result in significant changes in burn rate or elevated delivery of mainstream tar. (Column 3, Lines 17-20).

Claim 2 recites a wrapper for a smoking article of an electrical smoking system wherein tobacco is contained by the wrapper, the wrapper comprising a cellulosic web material and at least one filler therein, the filler being effective to reduce the content of gaseous components in the smoke produced upon combustion/pyrolysis of the smoking article in the electrical smoking system, wherein the filler includes an ammonium-containing compound filler in an amount effective to reduce aldehyde content in the mainstream smoke produced upon combustion/pyrolysis of the smoking article.

Claim 22 recites a cigarette of an electrical smoking system comprising a tobacco rod contained by a paper wrapper and an optional filter at one end of the cigarette, the paper wrapper comprising a cellulosic web material and at least one filler therein, the filler being effective to reduce the content of gaseous components in the smoke produced by combustion/pyrolysis of the cigarette in the electrical smoking system, wherein the filler includes an ammonium-containing compound filler in an amount effective to reduce aldehyde content in the mainstream smoke produced upon combustion/pyrolysis of the cigarette.

The Office Action asserts, "While there may be no specific articulation, in Brown et al, that [monoammonium phosphate] is provided in an amount effective to reduce aldehyde content, the Examiner believes that this is obviously the case." (Page 3). Specifically, referring to column 3, lines 59-62 of Brown, the Office Action contends that "Brown et al states that the particular paper compositions of its invention function by avoiding the production of aldehydes during smolder of the cigarette". The Office Action continues,

This suggests that the various additives, including the burn modifier, act to reduce the content of aldehyde in the cigarette smoke. Even though Brown et al may not mention that it is the monoammonium phosphate that reduces the aldehyde content, it follows that this compound would effectuate this result to some extent since it is well-known/evident that when heated at temperatures reached during smoking, ammonium salts release ammonia gas (in addition to carbon dioxide and water), which then would reduce the level of aldehyde in the cigarette smoke by chemical reaction. (This theory is even clear from Applicant's Table 1 on page 8 of the instant specification). Therefore, it follows that the monoammonium phosphate would contribute to the reduction of the aldehyde content in the smoke generated by the cigarette of Brown et al.

(Pages 3-4).

Applicants point out that Column 3, Line 58, through Column 4, Line 6, of Brown further discloses,

Salts of hydroxy acids, under pyrolytic conditions obtained during smoulder, may eliminate water across the appropriate carbon-to-carbon bond. This elimination could result in an unsaturated linkage which, through subsequent oxidative cleavage, could generate the low molecular weight aldehydes ... that are known irritants. On the other hand, a salt of a non-hydroxy acid such as succinic acid would not be expected to favor production of such irritants.

Thus, "the particular paper compositions" referred to by Brown that "function by avoiding the production of low molecular weight aldehydes ... during

smoulder" (Column 3, Lines 58-62) are those containing a carboxylic acid salt, preferably a nonhydroxy acid such as a succinic acid salt.

**Establishing a *Prima Facie* Case of Obviousness**

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

*In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP § 2142.

Applicants respectfully submit that Brown does not disclose or suggest all the claim limitations. Applicants point out that Brown is directed to an improved wrapper and resulting smoking article that materially reduce the quantity of ***sidestream*** smoke of a traditional lit-end cigarette. (See Column 1, Lines 18-20). Brown does not disclose or suggest a wrapper for a smoking article of an electrical smoking system such as described in commonly assigned U.S. Patent No. 5,692,525 (cited in Applicants' specification at page 6, line 29, through page 7, line 1). Electrical smoking systems are configured to obviate smoldering between puffs so as to minimize, if not eliminate, side stream smoke. (See also, commonly assigned U.S. Patent No. 5,144,962, column 1, at lines 14-16 ("electrically-heated articles do not produce a visible aerosol between puffs") and U.S. Patent No. 5,269,327, column 1, at lines 53-55). Brown does not teach or suggest a combination including an

ammonium-containing compound filler in an amount effective to reduce aldehyde content in the **mainstream** smoke produced upon combustion/pyrolysis of the smoking article.

Applicants further respectfully submit that the assertion in the Office Action that Brown provides monoammonium phosphate in an amount effective to reduce aldehyde content, though without specific articulation of such, is not found in the prior art, but rather is impermissibly based on applicant's disclosure. Specifically, the Office Action refers to Table 1 on page 8 of the **present application** in support of the allegedly well-known theory related to why Brown "may not mention that it is the monoammonium phosphate that reduces the aldehyde content." (Page 3).

#### **Impermissible Grounds for Rejection**

So long as a judgment on obviousness takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper. *In re McLaughlin*, 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971); MPEP § 2145.

Applicants respectfully submit that the Office Action has impermissibly resorted to "hindsight" based upon Applicants' disclosure. Specifically, the assertion in the Office Action that the theory that "when heated at temperatures reached during smoking, ammonium salts release ammonia gas (in addition to carbon dioxide and water), which then would reduce the level of aldehyde in the cigarette smoke by chemical reaction ... **is even clear from Applicant's Table 1 on page 8 of the instant specification**" (emphasis added) (Pages 3-4) is not based on teachings in

the prior art. Rather, the Office Action cites Applicants' disclosure to support the rejection.

**Reliance on Scientific Theory**

When an examiner relies on a scientific theory, evidentiary support for the existence and meaning of that theory must be provided. *In re Grose*, 592 F.2d 1161, 201 USPQ 57 (CCPA 1979); MPEP § 2144.02.

With regard to the assertion in the Office Action that "it is well-known/evident that when heated at temperatures reached during smoking, ammonium salts release ammonia gas (in addition to carbon dioxide and water), which then would reduce the level of aldehyde in the cigarette smoke by chemical reaction" (Page 3), Applicants respectfully submit that evidentiary support for the existence of that scientific theory must be provided. *See Grose, Id.*

For at least all of the above-noted reasons, Applicants respectfully submit that Claims 2, 3, 5-12, 14, 18, 20, and 22 are patentable over Brown. Accordingly, Applicants respectfully request that this rejection be withdrawn.

- II -

Claims 24 and 27 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,271,419 ("Arzonico"). Without conceding the propriety of the rejection, in order to expedite prosecution, Claims 24 and 27 have been canceled, thereby rendering the rejection moot.

**CONCLUSION**

From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

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